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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/989,732	11/19/2001	Avi J. Ashkenazi	P2730P1C57	2430
35489	7590	11/01/2004	EXAMINER	
HELLER EHRMAN WHITE & MCAULIFFE LLP 275 MIDDLEFIELD ROAD MENLO PARK, CO 94025-3506			JIANG, DONG	
			ART UNIT	PAPER NUMBER
			1646	

DATE MAILED: 11/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/989,732

Applicant(s)

ASHKENAZI ET AL.

Examiner

Dong Jiang

Art Unit

1646

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 123-126, 129-131 and 135-138 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 124-126, 129-131 and 135-138 is/are allowed.
- 6) ☒ Claim(s) 123 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

### **DETAILED OFFICE ACTION**

Applicant's amendment filed on 06 August 2004 is acknowledged and entered. Following the amendment, the original claims 119-122, 127, 128 and 132-134 are canceled, and claims 123-126, 129 and 130 are amended.

Currently, claims 123-126, 129-131 and 135-138 are pending and under consideration.

#### **Formal Matters:**

Claim 123 is objected to as being dependent upon a canceled claim, claim 119. The applicant is required to amend the claims to read only upon the pending claims, or to be an independent claim. Omission of "of claim 119" would be remedial.

#### **Withdrawal of Objections and Rejections:**

All objections and rejections of claims 119-122, 127, 128 and 132-134 are moot as the applicant has canceled the claims.

The rejection of claims 123-126, 129-131 and 135-138 under 35 U.S.C. 112, second paragraph, as being indefinite is withdrawn in view of applicant's amendment.

The scope rejection, and the rejection for lack of written description of claims 123, 124, and 135-138 under 35 U.S.C. 112, first paragraph are withdrawn in view of applicant's amendment.

The prior art rejection of claims 135-137 under 35 U.S.C. 102(b) as being anticipated by Birren et al. (Locus AC016498, GenEmbl, 3/26/00) is withdrawn in view of applicant's amendments.

The prior art rejection of claim 138 under 35 U.S.C. 103(a) as being unpatentable over Birren et al. (Locus AC016498, GenEmbl, 3/26/00), and in view of Sibson et al. (WO94/01548) is withdrawn in view of applicant's amendment.

#### **Rejections Over Prior Art:**

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The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 123 is rejected under 35 U.S.C. 102(b) as being anticipated by Birren et al. (Locus AC016498, GenEmbl, 3/26/00).

Birren discloses a human nucleic acid, which comprises nucleotides 106-531 (the coding region) of SEQ ID NO:269 of the instant invention with more than 99% sequence similarity (one nucleotide mismatch, see computer printout of the search results). The cited sequence, therefore, anticipates claim 123 as being a nucleic acid having at least 99% sequence identity to a nucleic acid encoding the polypeptide of SEQ ID NO:270. The reference, therefore, anticipates the claim.

**Conclusion:**

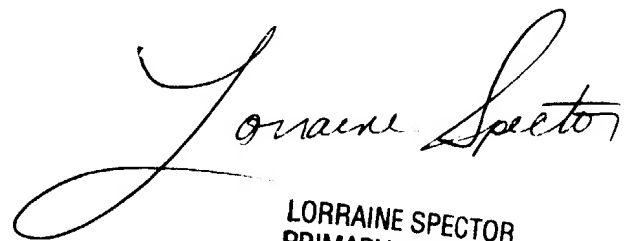
Claims 124-126, 129-131 and 135-138 are allowable.

Art Unit: 1646

**Advisory Information:**

Any inquiry concerning this communication should be directed to Dong Jiang whose telephone number is 571-272-0872. The examiner can normally be reached on Monday - Friday from 9:30 AM to 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brenda Brumback, can be reached on 571-272-0961. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

  
LORRAINE SPECTOR  
PRIMARY EXAMINER

Dong Jiang, Ph.D.  
Patent Examiner  
AU1646  
10/27/04

```

QY 723 GTGGGACAGCGGTAGGCGGTGATGCTGTTGTAACGACGAGGTAACTCCCGACG 782
Db 58572 GTGGGACAGCGGTAGGCGGTGATGCTGTTGTAACGACGAGGTAACTCCCGACG 58513
QY 783 CCCAAGAAAACCTGTGTGGAGTAACAACAACCTCCCTGCTCGGGACGAGCGGTTT 842
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RESULT 8
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LOCUS
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pieces.
AC016498
VERSION AC016498.4 GI:7329363
KEYWORDS HTG: HTGS PHASE1; HTGS_DRAFT.
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.
1 (bases 1 to 182765)
Birren, B., Linton, L., Nusbaum, C., and Lander, E.
Homo sapiens chromosome, clone RP11-3P4
Unpublished
2 (bases 1 to 182765)
Birren, B., Linton, L., Nusbaum, C., Lander, E., Allen, N., Anderson, M.,
Balwin, J., Barne, N., Beckerly, R., Boguslavsky, L., Boudgaltier, B.,
Brown, A., Castle, A., Colangelo, K., Collins, S., Collymore, A.,
Cooke, P., DeRellano, K., Dewar, K., Domino, M., Donegan, L., Doyle, M.,
Ferreira, P., Fitzhugh, W., Forrest, C., Funke, R., Gage, D.,
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Morrow, J., Naylor, J., Norman, C. H., O'Connor, T., O'Donnell, P.,
Peterson, K., Pollara, V., Riley, R., Roy, A., Santos, R., Severy, P.,
Stange-Thomann, N., Stojanovic, N., Subramanian, A., Talmas, J.,
Tessaye, S., Tirrell, A., Vasilev, H., Vo, A., Wheeler, J., Wu, X.,
Ye, W. J., Zimmer, A., and Zody, M.

```

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REFERENCE
AUTHORS
TITLE
JOURNAL
REFERENCES
D., Ye, W. J., Zimmer, A., and Zody, M.

```

# TITLE JOURNAL COMMENT

Direct Submission  
Submitted (01-DEC-1999) Whitehead Institute/MIT Center for Genome  
Research, 320 Charles Street, Cambridge, MA 02141, USA  
On Mar 26, 2000 this sequence version replaced gi:6957839.  
All repeats were identified using RepeatMasker:  
Smit, A.F.A. & Green, P. (1996-1997)  
http://ftp.genome.washington.edu/RM/RepeatMasker.html

Center: Whitehead Institute/ MIT Center for Genome Research  
Center code: WIBR  
Web site: http://www-seq.wi.mit.edu  
Contact: sequence\_submissions@genome.wi.mit.edu

Project Information  
Center project name: L2800  
Center clone name: 3\_p4

## Summary Statistics

Sequencing vector: MJ3; M77815; 100% of reads  
Chemistry: Dye-terminator Big Dye; 100% of reads  
Assembly program: Phrap; version 0.960731  
Consensus quality: 175642 bases at least Q40  
Consensus quality: 179256 bases at least Q40  
Consensus quality: 180642 bases at least Q30  
Insert size: 170000; agarose-fp  
Insert size: 181765; sum-of-contigs  
Quality coverage: 5.1 in Q20 bases; agarose-fp  
Quality coverage: 4.8 in Q20 bases; sum-of-contigs

\* NOTE: This is a 'working draft' sequence. It currently  
\* consists of 11 contigs. The true order of the pieces  
\* is not known and their order in this sequence record is  
\* arbitrary. Gaps between the contigs are represented as  
\* runs of N, but the exact sizes of the gaps are unknown.  
\* This record will be updated with the finished sequence  
\* as soon as it is available and the accession number will  
\* be preserved.

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1 1161: contig of 1161 bp in length
* 1162 1261: gap of 100 bp
* 1262 2289: contig of 1028 bp in length
* 2290 2389: gap of 100 bp
* 2390 3927: contig of 1538 bp in length
* 3928 4027: gap of 100 bp
* 4028 8438: contig of 4411 bp in length
* 8439 8538: gap of 100 bp
* 8539 20428: contig of 11890 bp in length
* 20429 20528: gap of 100 bp
* 20529 34082: contig of 13554 bp in length
* 34083 34182: gap of 100 bp
* 34183 48134: contig of 13952 bp in length
* 48135 48234: gap of 100 bp
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* 65539 65638: gap of 100 bp
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## FEATURES

### source

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ed Feb 11.

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QY 1083 AGGCCAGCTCAGATGACACACCCAGAGAGCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 1142  
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Homo sapiens  
ORGANISM  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.  
1 (bases 1 to 187799)  
DOE Joint Genome Institute.  
Sequencing of Human Chromosome 5  
Unpublished  
2 (bases 1 to 187799)  
DOE Joint Genome Institute.  
Direct Submission  
Submitted (10-JUN-2003) Production Sequencing Facility, DOE Joint  
Genome Institute, 2800 Mitchell Drive, Walnut Creek, CA 94598, USA  
-----Genome Center  
Center: Joint Genome Institute  
Center Code: JGI  
Web site: http://www.jgi.doe.gov  
-----  
Project Information  
Center Project Name: 1554882  
Center clone name: RPCI-11\_678B2  
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Summary Statistics  
Consensus quality: 185144 bases at least Q40  
Consensus quality: 185845 bases at least Q30  
Consensus quality: 186203 bases at least Q20  
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Estimated insert size: 187099; sum-of-ctigs estimation